

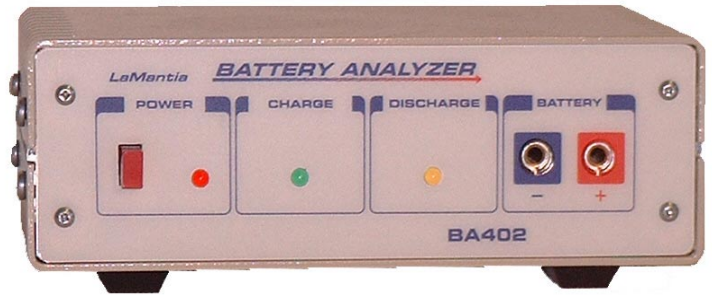
## PC Based Battery Management BA400 Series Battery Analyzers

### FEATURES

- Controlled using BA400WIN Windows™ software
- Connects to RS232 serial port using supplied cable. Optional USB cable available.
- High speed data collection 56K baud
- Programmable pulsing
- Pulses can be overlaid on standard charge and discharge algorithms
- Built in fan with auto on/off
- 12 bit A/D – D/A
- Voltage measurement – 16 auto-ranges for 1mV resolution.
- Current setting and measurement 1 mA res.
- Expandable to 100 channels
- Precise on board constant voltage/current regulation
- Multi-chemistry design for Lilon, Lead Acid, NiCd, NiMH
- Thermistor cable for external temperature measurement supplied. Or use internal thermistor
- Analyzer control using “Quick Select”, custom “Profiles” or programmable “Program” modes
- $-\Delta V$ , TCO,  $dT/dt$ , V, mAH, time and minimum current, termination options
- Constant voltage, constant current. Trickle and float charging. Constant power discharge feature.
- Internal resistance measurement
- Short circuit, reverse polarity and overload protection

### APPLICATIONS

- Battery charge, discharge, cycle, trickle & float
- Battery capacity measurement
- Battery charge monitoring
- Battery cycling
- Warranty validation
- Quality measurement
- Load simulation with pulse options
- Battery pack commissioning
- Creating custom battery testing algorithms
- Battery fleet maintenance
- Battery management routines
- Print reports for test documentation
- Life cycle testing
- Identify under performing batteries
- Select batteries for critical applications
- Recondition battery packs
- Validate manufacturer's specifications



### DESCRIPTION

The BA400 series of battery analyzers provides a powerful system to perform a variety of battery management tasks. This line of analyzers has many advanced features to provide users with advanced testing capabilities and good value.

There are several models to choose from in the BA400 series of analyzers. This provides a selection with various voltage and current limits. See specifications for details. The BA402 is the most economical providing up to 2A of charge and discharge current for batteries up to 20V.

Each model is operated using the BA400WIN software program included with each analyzer.

The BA400WIN software program is used to control the battery under test. The test parameters are set using the software program. All functions are controlled with on screen buttons and controls. See [www.lamantia.ca/software.html](http://www.lamantia.ca/software.html) for more information.

Each analyzer is supplied with PC cable, built in fan, temperature probe and battery cables ( banana plugs to alligator clips ). No additional equipment or power supplies are required. Just connect the analyzer to your computer's serial port, install the software and connect battery. An optional USB—RS232 converter is available.

## SPECIFICATIONS

PARAMETERS	BA402	BA405	BA403	BA453	Units
Maximum Charge Current	2000	5000	3000	3000	mA
Maximum Discharge Current	2000	5000	3000	3000	mA
Maximum Charge Power	40	100	120	120	W
Maximum Discharge Power	40	100	120	120	W
Maximum Battery Voltage	20	20	40	56	V
Max. No. of Series Cells NiCd/SLA/Lilon	12/8/4	12/8/4	24/16/9	34/22/13	Cells
Full Scale Voltage	20	20	40	56	V
Full Scale Current	2000	5000	3000	3000	mA
Accuracy % Full Scale	+/- 0.5	+/- 0.5	+/- 0.5	+/- 0.5	%
Minimum pulse interval	100	100	100	100	μS
D/A – A/D Conversion	12	12	12	12	bits
Voltage Measurement Res. -16 auto-ranges	1	1	1	1	mV
Current Measurement Resolution	1	1	1	1	mA
Charge Measurement Resolution	0.1	0.1	0.1	0.1	mAH
Voltage Regulation Resolution	5	5	10	14	mV
Current Regulation Resolution	1	1	1	1	mA
Size WxHxD	19x7x14	25x10x19	25x10x19	25x10x19	cm
Power Supply	External	Internal	Internal	Internal	

Data and specifications subject to change without notice.

Also available BA421 (+/- 200mA/10V) and BA420 (+/- 20mA/10V) for very low current testing

Other voltage and current configurations available by special order.

## SOFTWARE

- BA400WIN Windows software license included
- Includes manual and software CD
- License includes software updates via internet
- Windows95, 98, 2000, ME, NT, XP compatible
- Print reports
- Plot graphs with powerful data collection and zoom features.
- Export data for analysis
- Save session results for future reference
- Programmable pulse control
- Software allows for quick setup or detailed control
- Requires 8M memory, 4M hard disk storage
- Graphical display plots V, I, T or dT/dt
- Log data to disk

These analyzers require a PC running the supplied software at all times. The software can operate in the background to free your computer for other use.

Supplied with 30 day satisfaction guarantee and 2 year warranty. Available from:

LaMantia Products Ltd.  
1663 Jubilee Dr.  
London, Ontario, Canada, N6G 5K4  
TEL: 800-673-3585 or 519-472-5566  
FAX: 519-472-1702  
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